IN THE CLAIMS:

Please amend the claims as indicated below. The following listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (Currently amended) A method for executing graphical data flow programs, the method comprising:

executing a first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

executing a second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein said executing the first graphical data flow program and said executing the second graphical data flow program are performed without invocation of the first and second graphical data flow programs by a third graphical data flow program; and

displaying the first program output and the second program output in a single graphical user interface panel on a display.

2.   (Currently amended) The method of claim 1, further comprising:

receiving user input to the single graphical user interface panel during said executing; and

providing the user input to at least one of the first graphical data flow program or the second graphical data flow program.

3.   (Currently amended) The method of claim 2, further comprising:

the at least one of the first graphical data flow program or the second graphical data flow program executing using the user input to produce a resulting output; and

displaying the resulting output on the single graphical user interface panel.

4.   (Currently amended) The method of claim 1, further comprising:

2

receiving user input to the single graphical user interface <u>panel</u> during said executing;

providing the user input to at least one of the first graphical data flow program or the second graphical data flow program in real time as the user input is received;

the at least one of the first graphical data flow program or the second graphical data flow program executing in real time using the user input to produce a resulting output; and

displaying the resulting output on the single graphical user interface <u>panel</u> as the resulting output is produced.

5.　　(Original) The method of claim 1,

wherein the first graphical data flow program executes on a first computer system;

wherein the second graphical data flow program executes on a second computer system.

6.　　(Currently amended) The method of claim 5,

wherein the display that displays the single graphical user interface <u>panel</u> is comprised on one of the first computer system or the second computer system;

wherein the first computer system is coupled to the second computer system by a network.

7.　　(Currently amended) The method of claim 5,

wherein the display that displays the single graphical user interface <u>panel</u> is comprised on a third computer system;

wherein the third computer system is coupled to the first computer system and the second computer system by a network.

8.　　(Original) The method of claim 1, further comprising:

displaying the first graphical data flow program on the display; and

displaying the second graphical data flow program on the display.

9.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a first plurality of interconnected nodes that visually indicate functionality of the first graphical data flow program;

wherein the second graphical data flow program comprises a second plurality of interconnected nodes that visually indicate functionality of the second graphical data flow program.

10.   (Original) The method of claim 9, further comprising:

creating the first graphical data flow program, wherein said creating the first graphical data flow program comprises arranging the first plurality of nodes on a display and interconnecting the first plurality of nodes in response to user input; and

creating the second graphical data flow program, wherein said creating the second graphical data flow program comprises arranging the second plurality of nodes on a display and interconnecting the second plurality of nodes in response to user input.

11.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a first plurality of node icons that are connected by lines on the display, wherein the lines indicate data flow connections between the first plurality of node icons.

12.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a first plurality of node icons that are connected by first lines on the display, wherein the first lines indicate data flow connections between the first plurality of node icons;

wherein the second graphical data flow program comprises a second plurality of node icons that are connected by second lines on the display, wherein the second lines indicate data flow connections between the second plurality of node icons.

13.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a first plurality of node icons that are connected by lines on the display, wherein the lines indicate that data produced by one connected node icon is used by another connected node icon.

14.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a first plurality of node icons that are connected by lines on the display, wherein a respective line connecting a respective first node icon and a respective second node icon indicates that data produced by the respective first node icon is used by the respective second node icon.

15.   (Original) The method of claim 1,

wherein the first graphical data flow program comprises a data flow block diagram.

16.   (Original) The method of claim 1,

wherein at least one of the first and second graphical data flow programs executes on a reconfigurable instrument.

17.   (Currently amended) The method of claim 1,

wherein the first and second graphical data flow programs perform a measurement function;

wherein the single graphical user interface panel displays measurement data output from at least one of the first and second graphical data flow programs.

18.   (Original) The method of claim 1,

wherein the first graphical data flow program is associated with a first graphical program development environment;

wherein the second graphical data flow program is associated with a second graphical program development environment, wherein the second graphical program development environment is different than the first graphical program development environment.

19.   (Original) The method of claim 1,

wherein the first graphical data flow program is developed according to a first graphical programming language;

wherein the second graphical data flow program is developed according to a second graphical programming language, wherein the second graphical programming language is different than the first graphical programming language.

20.   (Original) The method of claim 19,

wherein the first graphical programming language is the G language.

21.   (Original) The method of claim 1, further comprising:

creating the first graphical data flow program in a first graphical program development environment; and

creating the second graphical data flow program in a second graphical program development environment, wherein the second graphical program development environment is different than the first graphical program development environment.

22.   (Currently amended) The method of claim 21, further comprising:

creating the single graphical user interface panel in the first graphical program development environment.

23.   (Currently amended) The method of claim 22,

wherein the single graphical user interface panel operates as a front panel for the first graphical program and the second graphical program.

24.   (Currently amended) The method of claim 21, further comprising:

creating a first portion of the single graphical user interface panel in the first graphical program development environment; and

creating a second portion of the single graphical user interface panel in the second graphical program development environment; and

6

combining the first portion of the single graphical user interface panel and the second portion of the single graphical user interface panel to create the single graphical user interface panel.

25. (Original) The method of claim 1, further comprising:

creating the first graphical data flow program in a first graphical program development environment, wherein said creating the first graphical data flow program comprises arranging the first plurality of nodes on a display and interconnecting the first plurality of nodes in response to user input; and

creating the second graphical data flow program in a second graphical program development environment, wherein said creating the second graphical data flow program comprises arranging the second plurality of nodes on a display and interconnecting the second plurality of nodes in response to user input.

26. (Currently amended) The method of claim 1,

wherein the single graphical user interface panel operates as a front panel for the first graphical program and the second graphical program;

wherein the front panel is accessible by the user during said executing the first and second graphical data flow programs;

the method further comprising:

receiving user input to the single graphical user interface panel during said executing the first and second graphical data flow programs, wherein the user input is intended for at least one of the first and second graphical data flow programs;

the at least one of the first and second graphical data flow programs executing using the user input when the user input is received to produce a resulting output; and

displaying the resulting output on the single graphical user interface panel.

27. (Original) The method of claim 1,

wherein the first graphical data flow program is one of:

a LabVIEW program;

7

a Simulink program; or

a VEE program.

28.   (Currently amended) A method for executing graphical data flow programs, the method comprising:

creating a first graphical data flow program in a first graphical program development environment; and

creating a second graphical data flow program in a second graphical program development environment, wherein the second graphical program development environment is different than the first graphical program development environment.

executing the first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

executing the second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein said executing the first graphical data flow program and said executing the second graphical data flow program are performed without invocation of the first and second graphical data flow programs by a third graphical data flow program; and

displaying the first program output and the second program output in a single graphical user interface panel on a display.

29.   (Currently amended) The method of claim 28,

wherein the single graphical user interface panel operates as a front panel for the first graphical program and the second graphical program.

30.   (Currently amended) The method of claim 28, further comprising:

creating the single graphical user interface panel in the first graphical program development environment.

31.   (Currently amended) The method of claim 28, further comprising:

creating the single graphical user interface panel in at least one of the first graphical program development environment and the second graphical program development environment.

32. (Currently amended) The method of claim 28, further comprising:

creating a first portion of the single graphical user interface panel in the first graphical program development environment; and

creating a second portion of the single graphical user interface panel in the second graphical program development environment; and

combining the first portion of the single graphical user interface panel and the second portion of the single graphical user interface panel to create the single graphical user interface panel.

33. (Currently amended) The method of claim 28, further comprising:

receiving user input to the single graphical user interface panel during said executing; and

providing the user input to at least one of the first graphical data flow program or the second graphical data flow program.

34. (Currently amended) The method of claim 33, further comprising:

the at least one of the first graphical data flow program or the second graphical data flow program executing using the user input to produce a resulting output; and

displaying the resulting output on the single graphical user interface panel.

35. (Currently amended) The method of claim 28, further comprising:

receiving user input to the single graphical user interface panel during said executing;

providing the user input to at least one of the first graphical data flow program or the second graphical data flow program in real time as the user input is received;

the at least one of the first graphical data flow program or the second graphical data flow program executing in real time using the user input to produce a resulting output; and

displaying the resulting output on the single graphical user interface panel as the resulting output is produced.

36.   (Currently amended) A method for providing a single graphical user interface shared by a plurality of programs, wherein at least one of the plurality of programs is a graphical data flow program, the method comprising:

executing a plurality of programs concurrently, wherein each of the programs is operable to produce program output, [[and]] wherein at least one of the programs is a graphical data flow program, and wherein said executing the plurality of programs concurrently is performed without invocation of the plurality of programs by a graphical data flow program;

receiving the program output of each program; and

displaying the program output of each program in a single graphical user interface panel.

37.   (Currently amended) The method of claim 36, further comprising:

receiving program input to the single graphical user interface panel; and

providing the program input to at least one of the plurality of programs.

38.   (Currently amended) A method for providing a single graphical user interface shared by a plurality of graphical data flow programs, the method comprising:

executing a plurality of graphical data flow programs concurrently, wherein each of the graphical data flow programs is operable to produce program output, and wherein said executing the plurality of graphical data flow programs concurrently is performed without invocation of the plurality of graphical data flow programs by a graphical data flow program;

receiving the program output of each graphical data flow program; and

displaying the program output of each graphical data flow program in a single graphical user interface panel.

39. (Currently amended) The method of claim 38, further comprising:

receiving program input to the single graphical user interface panel; and

providing the program input to at least one of the plurality of graphical data flow programs.

40. (Currently amended) A memory medium for executing graphical data flow programs, the memory medium comprising program instructions executable to:

receive first program output of a first graphical data flow program;

receive second program output of a second graphical data flow program executing concurrently with the first graphical data flow program, wherein concurrent execution of the first graphical data flow program and the second graphical data flow program is performed without invocation of the first graphical data flow program and the second graphical data flow program by a third graphical data flow program;

display the first program output and the second program output in a single graphical user interface panel on a display.

41. (Currently amended) The memory medium of claim 40, further comprising program instructions executable to:

receive program input to the single graphical user interface panel; and

provide the program input to at least one of the first graphical data flow program or the second graphical data flow program.

42. (Original) The memory medium of claim 40,

wherein the first graphical data flow program executes on a first computer system;

wherein the second graphical data flow program executes on a second computer system.

43.   (Currently amended) The memory medium of claim 42,

wherein the display that displays the single graphical user interface panel is comprised on one of the first computer system or the second computer system;

wherein the first computer system is coupled to the second computer system by a network.

44.   (Currently amended) The memory medium of claim 43,

wherein the display that displays the single graphical user interface panel is comprised on a third computer system;

wherein the third computer system is coupled to the first computer system and the second computer system by a network.

45.   (Original) The memory medium of claim 40,

wherein the first graphical data flow program comprises a first plurality of interconnected nodes that visually indicate functionality of the first graphical data flow program;

wherein the second graphical data flow program comprises a second plurality of interconnected nodes that visually indicate functionality of the second graphical data flow program.

46.   (Original) The memory medium of claim 40,

wherein the first graphical data flow program comprises a data flow block diagram.

47.   (Original) The memory medium of claim 40,

wherein at least one of the first and second graphical data flow programs executes on a reconfigurable instrument.

48.   (Currently amended) The memory medium of claim 40,

wherein the first and second graphical data flow programs perform a measurement function;

wherein the single graphical user interface_panel displays measurement data output from at least one of the first and second graphical data flow programs.

49.   (Original) The memory medium of claim 40,

wherein the first graphical data flow program is associated with a first graphical program development environment;

wherein the second graphical data flow program is associated with a second graphical program development environment, wherein the second graphical program development environment is different than the first graphical program development environment.

50.   (Original) The memory medium of claim 40,

wherein the first graphical data flow program is one of:

a LabVIEW program;

a Simulink program; or

a VEE program.

51.   (Currently amended) A system for executing graphical data flow programs, the system comprising:

a first computer system;

a second computer system;

a third computer system coupled to first and second computer systems;

a display device coupled to the third computer system;

wherein the first computer system executes a first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

wherein the second computer system executes a second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein

concurrent execution of the first graphical data flow program and the second graphical data flow program is performed without invocation of the first and second graphical data flow programs by a third graphical data flow program;

wherein the third computer system displays the first program output and the second program output in a single graphical user interface panel on the display device.

52.   (Currently amended) A system for executing graphical data flow programs, the system comprising:

a first computer system;

a second computer system coupled to first computer system;

a display device coupled to the first computer system;

wherein the first computer system executes a first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

wherein the second computer system executes a second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein concurrent execution of the first graphical data flow program and the second graphical data flow program is performed without invocation of the first and second graphical data flow programs by a third graphical data flow program;

wherein the first computer system displays the first program output and the second program output in a single graphical user interface panel on the display device.

53.   (Currently amended) A system for executing graphical data flow programs, the system comprising:

a computer system;

a display device coupled to the computer system;

wherein the computer system executes a first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

wherein the computer system executes a second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein concurrent execution of the first graphical data flow program and the second graphical data flow program is performed without invocation of the first and second graphical data flow programs by a third graphical data flow program;

wherein the computer system displays the first program output and the second program output in a single graphical user interface panel on the display device.

54.　(Currently amended) A system for executing graphical data flow programs, the system comprising:

a computer system including a processor;

a reconfigurable instrument coupled to computer system;

a display device coupled to the computer system;

wherein the processor of the computer system executes a first graphical data flow program, wherein said executing the first graphical data flow program produces first program output;

wherein the reconfigurable instrument executes a second graphical data flow program concurrently with the first graphical data flow program, wherein said executing the second graphical data flow program produces second program output, and wherein concurrent execution of the first graphical data flow program and the second graphical data flow program is performed without invocation of the first and second graphical data flow programs by a third graphical data flow program;

wherein the computer system displays the first program output and the second program output in a single graphical user interface panel on the display device.

55.　(Currently amended) A method for performing a software simulation, the method comprising:

executing a simulation program, wherein the simulation program comprises a first graphical program;

15

executing a measurement program concurrently with the simulation program, wherein the measurement program comprises a second graphical program, and wherein concurrent execution of the first graphical program and the second graphical program is performed without invocation of the first and second graphical programs by a third graphical program; and

displaying a single graphical user interface panel comprising a first plurality of graphical user interface elements for the simulation program and a second plurality of graphical user interface elements for the measurement program.

56. (Original) The method of claim 55,

wherein the first plurality of graphical user interface elements includes one or more GUI controls for providing input to the simulation program.

57. (Original) The method of claim 55,

wherein the first plurality of graphical user interface elements includes one or more GUI indicators for displaying output of the simulation program.

58. (Original) The method of claim 55,

wherein the second plurality of graphical user interface elements includes one or more GUI controls for providing input to the measurement program.

59. (Original) The method of claim 55,

wherein the second plurality of graphical user interface elements includes one or more GUI indicators for displaying output of the measurement program.

60. (Original) The method of claim 55, further comprising:

creating the first graphical program; and

creating the second graphical program;

wherein said creating the first graphical program comprises using a first graphical program development environment to create the first graphical program;

wherein said creating the second graphical program comprises using a second graphical program development environment to create the second graphical program.

61.　(Original) The method of claim 60,

wherein the first graphical program is created using the Simulink graphical program development environment; and

wherein the second graphical program is created using the LabVIEW graphical program development environment.

62.　(Currently amended) A method for simulating operation of a product, the method comprising:

executing a simulation program which simulates operation of the product, wherein the simulation program comprises a first graphical program;

executing a measurement program concurrently with the simulation program, wherein the measurement program measures characteristics of the operation of the product, wherein the measurement program comprises a second graphical program, and wherein said executing the first graphical program and said executing the second graphical program are performed without invocation of the first and second graphical programs by a third graphical program; and

displaying a single graphical user interface panel comprising a first plurality of graphical user interface elements for the simulation program and a second plurality of graphical user interface elements for the measurement program.

63.　(Currently amended) The method of claim 62,

wherein the single graphical user interface panel comprises a front panel that can be interactively used to assign input values to and display resulting output values from at least one of the simulation program and the measurement program.

64.　(Original) The method of claim 62, wherein the first graphical program is a data flow program.

65.   (Original) The method of claim 62, wherein the second graphical program is a data flow program.

66.   (Currently amended) A method for simulating operation of a product, the method comprising:

executing a first graphical program which simulates operation of the product, wherein the first graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the first graphical program;

executing a second graphical program concurrently with the first graphical program, wherein the second graphical ~~progarm~~ program measures characteristics of the operation of the product, wherein the second graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the second graphical program, and wherein said executing the first graphical program and said executing the second graphical program are performed without invocation of the first and second graphical programs by a third graphical program; and

displaying a single graphical user interface panel comprising a first plurality of graphical user interface elements for the first graphical program and a second plurality of graphical user interface elements for the second graphical program.

67.   (Currently amended) The method of claim 66,
wherein the single graphical user interface panel comprises a front panel that can be interactively used to assign input values to and display resulting output values from at least one of the first graphical program and the second graphical program.

68.   (Original) The method of claim 66, wherein the first graphical program is a data flow program.

69.   (Original) The method of claim 66, wherein the second graphical program is a data flow program.